

# CEE 4100 Construction Engineering and Management Syllabus

CEE 4100-A, 3 Credits

Summer 2026

## Instructor Information

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Instructor: Eric Marks

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Office: Mason Building Room 4140C

Office Hours: Virtual by appointment with the instructor.

## General Course Information

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### Description

Fundamental concepts in planning, design, and construction of civil engineering projects. Introduction to project scheduling, cost estimating, controls, procurement, value engineering, quality assurance, and safety.

### Course Website

Canvas.gatech.edu

### Course Schedule and Location

Monday through Friday (9:30am - 12:15pm)

MS Teams (Virtual Course)

### Course Learning Outcomes

Upon completion of the course, students should be able to do the following:

- Explain the impact of historical and contemporary issues on construction engineering practice.
- Develop solutions to well-defined construction project management challenges.
- Apply relevant knowledge, techniques, skills, and modern engineering tools to identify, formulate, and solve engineering problems in construction engineering.
- Apply relevant knowledge, techniques, skills, and modern engineering tools to identify, formulate, and solve engineering problems in Construction Engineering and Management.
- Explain basic concepts in engineering management and business, basic concepts of construction law and topics in construction globalization.

### Required Course Materials

No textbooks are required for this course. Research articles and industry news documents will be posted on the class website.

### Grading Policy:

<i>Criteria</i>	<i>Weight</i>
Assignments	50%

Exam 1	15%
Exam 2	15%
Final Exam	20%

**Grading Scheme:**

<i>Percentage</i>	<i>Grade</i>
90.0 - 100.0%	A
80.0 - 89.9%	B
70.0 - 79.9%	C
60.0 - 69.9%	D
59.9% or lower	F

## Course Policies

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### **Attendance and/or Participation**

Regular attendance is expected and encouraged. Each student is responsible for all material and administrative instructions given during the lecture period. Attendance may be taken periodically throughout the semester.

### **Academic Integrity**

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review [Georgia Tech's Honor Code](#) and the student [Code of Conduct](#).

Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

### **Core IMPACTS**

[Core IMPACTS](#) is the University System of Georgia's General Education curriculum. If you are teaching a course that counts towards Core IMPACTS, you should include a syllabus statement about the Core area and associated [career competencies](#). [This resource](#) developed by the Center for Excellence in Teaching and Learning and Online Education at Georgia State University includes template syllabus statements for each of the Core IMPACTS areas that you may adapt for your course.

### **Accommodations for Students with Disabilities**

If you are a student with learning needs that require special accommodation, [contact the Office of Disability Services](#) (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible to set up a time to discuss your learning needs.

### **Student-Faculty Expectations Agreement**

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student

body. [The Student-Faculty Expectations](#) articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

### **Exam Policy**

Exams will cover material given in class (lecture, notes, and handouts), posted articles, assignments and projects. Exam dates are listed in the course schedule and will not be changed. Only university excused circumstances will be considered for make-up exams.

### **Assignment Policy**

Assignments will be provided throughout the semester and is an essential part of understating the course material. Completed assignments will be submitted on the Canvas course website. There will be two types of assignments: In-class assignments and take-home assignments. In-class assignments will be completed during the duration of one class period. The instructor will replace two of a student's lowest assignment scores with a perfect score. The replacement will account for instances when students need to miss class and/or deadlines for university-excused absences.

### **Attendance Policy**

Regular attendance is expected and encouraged. Each student is responsible for all material and administrative instructions given during the lecture period. Attendance may be taken periodically throughout the semester.

### **Collaboration, Group Work, and Use of Generative AI**

A student may only use generative AI programs to help generate ideas and brainstorm. A student should be aware that material generated by these programs may be inaccurate, incomplete, biased, or otherwise problematic. Use of these tools may stifle a student's independent thinking and creativity. Per Georgia Tech's Honor Code, a student may not submit any work generated by an AI program their own.

## **Campus Resources for Students**

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### **Undergraduate Student Academic Success Resources:**

- Academic Support: Academic Success and Advising (a unit in the Office of Undergraduate Education & Student Success) provides free support for your courses. Students can attend scheduled supplemental review (PLUS) sessions, stop by Drop-In Tutoring, or schedule a one-on-one appointment through Knack. To explore what options work best for you, please visit us online at

[success.gatech.edu/tutoring](https://success.gatech.edu/tutoring), email us at [tutoring@gatech.edu](mailto:tutoring@gatech.edu), or come see us at Clough Undergraduate Learning Commons, Suite 283.

**Student Well-Being:**

At Georgia Tech, we are concerned about your overall physical, social, and mental well-being. A [comprehensive list](#) of wellness related resources has been compiled and maintained by the Office of the Vice President for Student Engagement and Well-being ([student-resource-guide \(gatech.edu\)](#))

**Course Schedule:**

<i>Date</i>	<i>Class Topic</i>
May 18	Introduction to Construction Engineering
May 19	Project Stakeholders / Contracts
May 20	Business Structure / Safety
May 21	Drawings and Specifications / Cost Estimating
May 22	Guest Presentation / <b>Exam 1</b>
May 25	<b>No Class: Memorial Day</b>
May 26	Bonding / Construction Law
May 27	Scheduling
May 28	Resource Leveling
May 29	PERT / <b>Exam 2</b>
June 1	Line-of-Balance
June 2	S-Curve
June 3	Construction Employees
June 4	Course Review and Discussion
June 5	<b>Final Exam</b>